

ABSTRACT OF THE DISCLOSURE

5 A control device estimate a magnitude of a load applied to a magnetic bearing by processing a current instruction (I_{ref}) issued by itself with a low-pass filter. The control device changes a control model in feedback control of the magnetic bearing in accordance with the estimated magnitude of the load, and calculates a control parameter such as a gain in the changed control model. Further, control device sets the calculated control parameter in a feedback controller performing actual feedback control.